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OCT 22 2010

Federal Communications Commission
Office of the Secretary

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October 22, 2010

Via Hand Delivery

ORIGINAL

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Notice of Ex Parte Presentation, CC Docket No. 01-92, GN Docket No. 09-51
REDACTED – FOR PUBLIC INSPECTION

Dear Ms. Dortch:

Pursuant to 47 CFR § 1.1206(b), this letter is to report that Surendra Saboo, Chief Operating Officer, and Richard Monto, General Counsel of Neutral Tandem, Inc., along with the undersigned, made an oral *ex parte* presentation concerning the above-referenced dockets on October 21, 2010, to the following personnel of the Wireline Competition Bureau: Rebekah Goodheart, Victoria Goldberg, Michael Goldstein, Betsy McIntyre, Randy Clarke, Albert Lewis, Jay Atkinson, and Douglas Slotten.

The purpose of the presentation was to discuss the costs and benefits of IP interconnection among voice service providers. Mr. Saboo explained that Neutral Tandem has completely converted its switching facilities from circuit switches to IP-based soft switches. Trunks connecting Neutral Tandem to its customers' switches can use either TDM (time-division multiplexed) or SIP (IP-based Session Initiation Protocol) protocols, at the customer's option; these trunks are connected to a Media Gateway device within Neutral Tandem's network that converts all traffic to a consistent IP-based protocol. Mr. Saboo stated that Neutral Tandem has achieved significant cost reductions as a result of this conversion, although the conversion took approximately three years, and for that period the company's costs increased because it was operating both technologies side-by-side during the transition.

The cost savings from switch conversion include (a) reductions in circuit costs because of the more efficient capacity utilization of SIP trunking; (b) reduced switch costs per port; (c) reduced space needs because of the much smaller footprint of softswitch equipment; (d) reduced utility costs because of the much smaller energy requirements of softswitch equipment; and (e) elimination of some SS7 signaling overhead. Mr. Saboo noted that while signaling between circuit switches requires separate SS7 circuits for out-of-band signaling, SIP signaling between softswitches is carried as part of the SIP packets and

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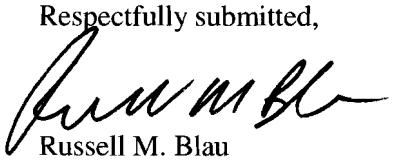
does not require separate circuits. He estimated that SS7 signaling accounts, very roughly, for approximately 10% of the costs in a typical TDM network. Neutral Tandem still must maintain SS7 signaling for those customers who interconnect with it over TDM trunks.

Mr. Saboo also explained that adoption of softswitches and SIP trunking varies considerably among the voice service providers that use Neutral Tandem's services. When customers convert to SIP trunking, the company can realize additional cost savings through more efficient capacity utilization, more efficient utilization of Media Gateway resources, and elimination of SS7 circuits, as noted earlier.

The attached written materials were presented during the meeting, which summarize the key points made by Neutral Tandem. The written materials contain confidential information and are being submitted pursuant to the Protective Order adopted in the above-referenced dockets on September 16, 2010 (DA 10-1749). Accordingly, we are providing two copies of the Confidential version of the written materials to Lynne Engeldow with a copy of this letter, as required by the Protective Order. In addition, one copy of the Confidential version of the written materials and two copies of a public version of this letter and the Redacted version of the written materials are being submitted for filing with this letter.

Respectfully submitted,



Russell M. Blau

Attachments (2)

Typical Softswitch Deployment Model

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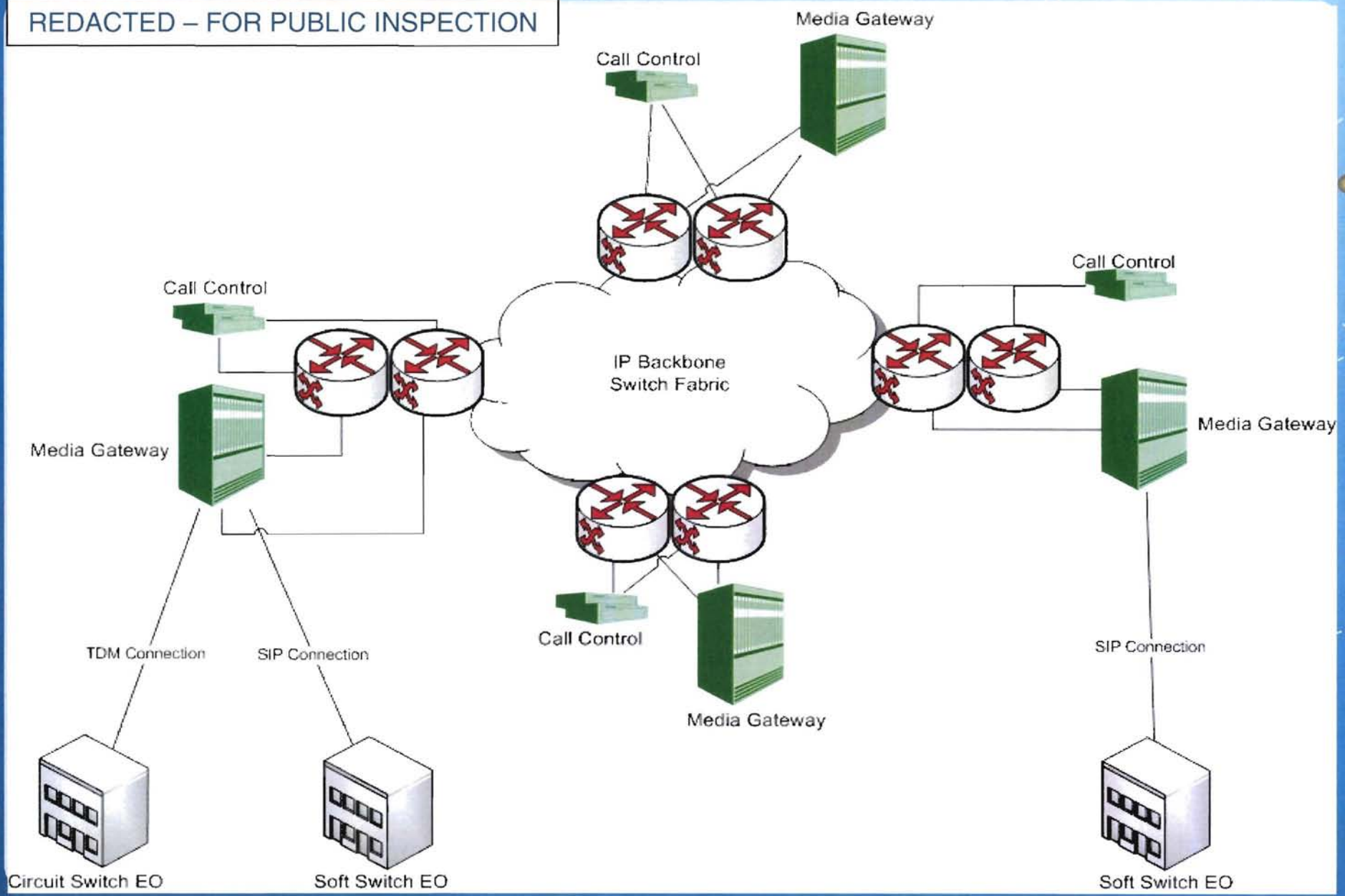

Benefits of Operating SIP Interconnection

NEUTRAL TANDEM

1. **Managing Session Limits on a SIP IP Trunk Group is vastly more efficient.**
   - There are no physical channels to augment or decrease
   - Simply enter the session limit into the softswitch
   - An augment of 1,000 sessions can be done in minutes

2. **Automatic Protection can dynamically converge calls from a failed link in one market to another link in a geographically diverse market utilizing BGP (Border Gateway Protocol).**
   - The call stays up and the IP carrying the voice media is routed to a different physical connection.

SIP Vs. TDM Redundancy

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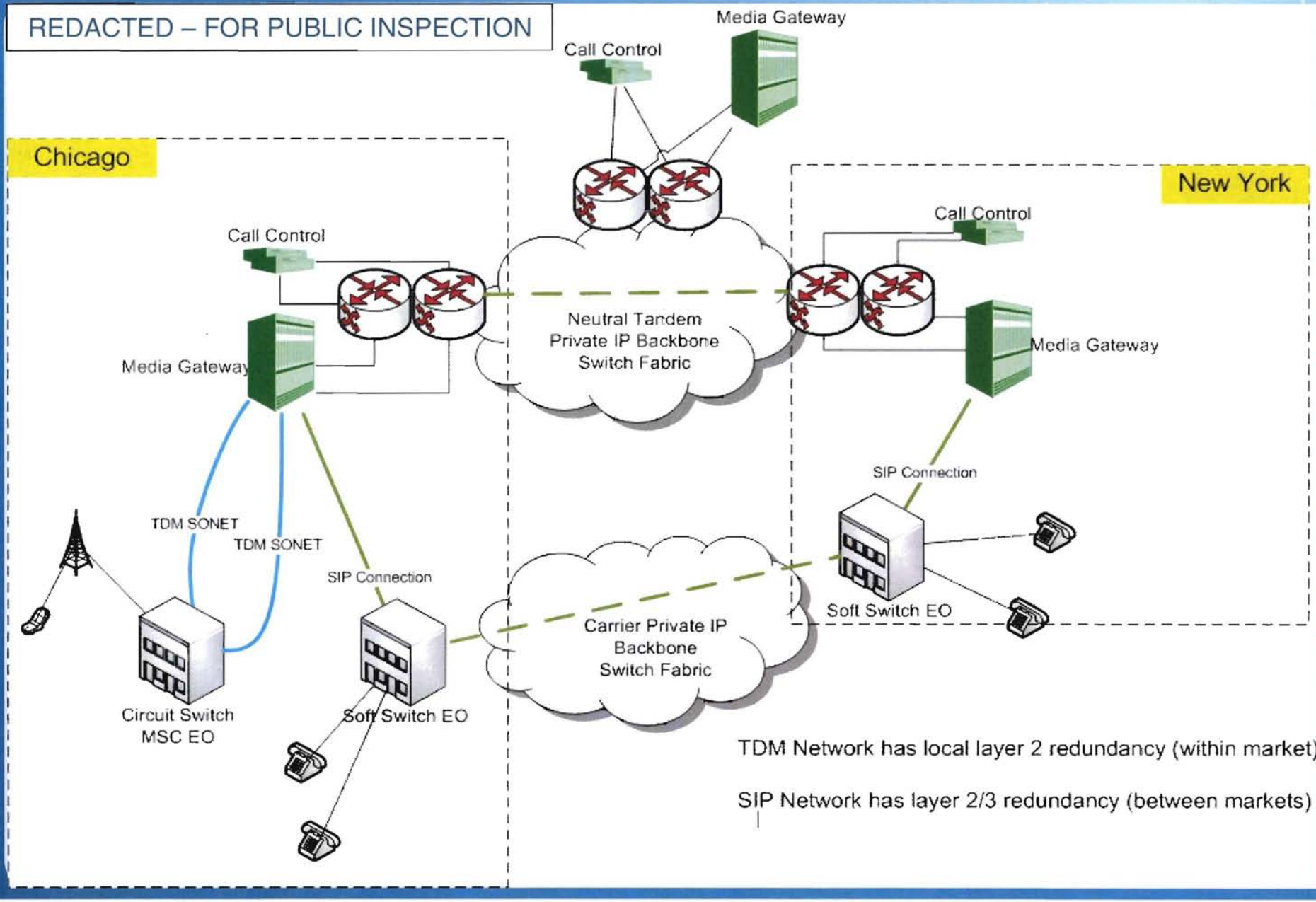

TDM Network has local layer 2 redundancy (within market)

SIP Network has layer 2/3 redundancy (between markets)

Benefits of SIP Trunking

1. **Transport costs for Metro Ethernet service are much more efficient than TDM costs**
   - TDM DS3 metro cost ~ $[Redacted]/mo. and supports 672 channels
   - Metro Ethernet GigE cost ~ $[Redacted]/mo. and supports ~ 9,000 channels
   - SIP Transport is 3 times more efficient per channel

2. **SS7 Signaling Costs**
   - The SS7 network is not used.
   - All signaling is done over the IP Network

3. **Softswitch Advantage over Circuit Switch**
   - Much more effective price per port
   - The switch fabric that ties switch routing resources to switch ports is connected via a standard IP infrastructure
   - Size reduction: 108 racks with CS vs. 6 racks with softswitch
   - Power reduction: $[Redacted]/year/site in utility savings

Hurdles to SIP Adoption

- **Billions invested in functional TDM infrastructure**
- **TDM Dominates**
- **Knowledge and Skillset Gaps**
  - Requires hiring of SIP-savvy personnel and training existing TDM-centric employees in the world of SIP and IP
- **New OAM Infrastructure**
  - Requires investment in and development of back-office infrastructure required to test, trouble shoot and turn up SIP trunks

Drivers for SIP deployment

- Wireless deployment of 4G
- New entrants into the market…"greenfield" deployments
- Switch manufacturers discontinuing older equipment
- Support customer demand for newer features

The Market is Addressing SIP Interconnection Needs

- **Numerous alternatives for SIP Interconnection available today**
- **Multiple competitors already invested in the technology**
- **Neutral Tandem Connections Demonstrate**
  - [Redacted]% of all switch interconnections are SIP as of October 2010
  - [Redacted]% of wireless TNs
  - [Redacted]% of CLEC TNs
  - PSTN Gateway fills in remaining footprint